## Worksheet 2: Shapes project, basic BlueJ

For lab session 1.

General Steps

1. Download CS12320-leadin.zip from Blackboard.
2. Right click on it and choose *Extract all* to unzip it. (or unzip it however you normally would).
3. With BlueJ running select the menu *Project->Open Project* to open the *shapes* example.

Compiling steps

When you open a BlueJ project for the first time you will often have to compile the source code. This means that human readable .java source code files are converted into .class files that contain a special language called bytecode that can be run by Java. It's in a form that the Java program can understand (.java file are not).
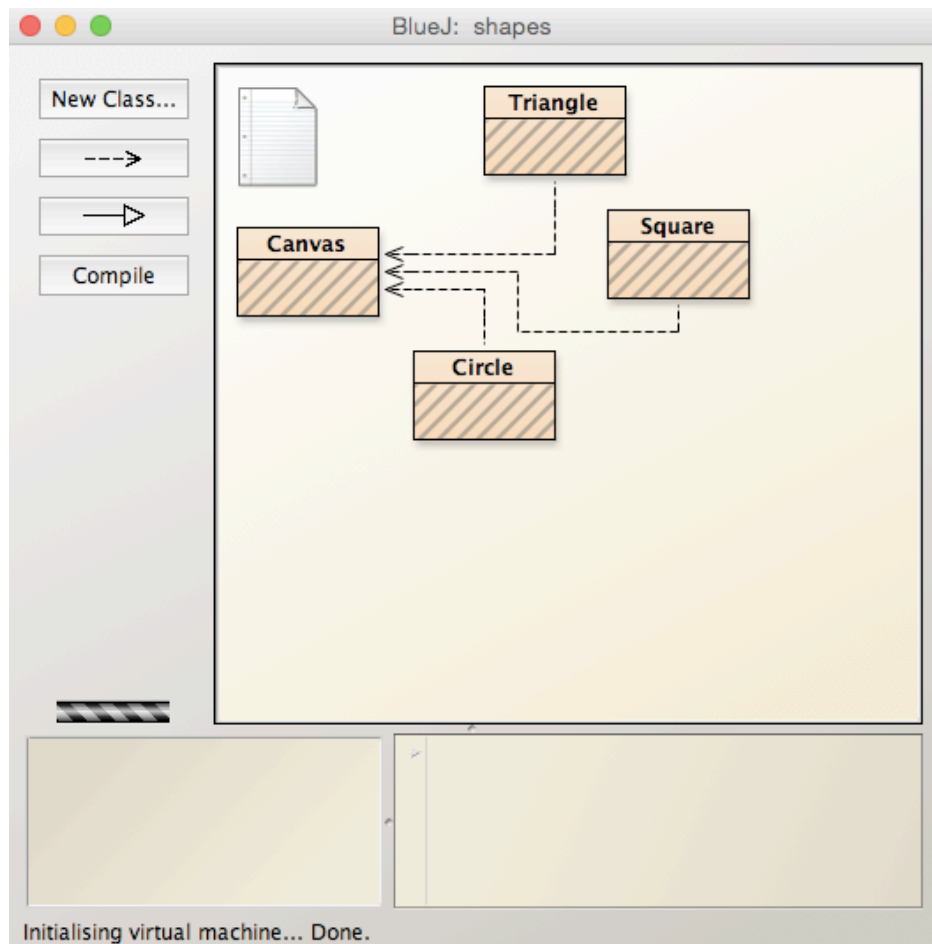

If the class window displays classes with diagonal lines across them then you know they must be compiled. Press the Compile button to do this. Ignore any warning messages. The lines should disappear off the classes.

If they don't and you get ERRORS the problem is probably that you don't have the file names with capital letters. If necessary, fix it and try again.

Using the Object bench and codepad steps

1. Right click on a class and select new Circle() or whatever. Click OK.
   It will give you an object in the bottom left window - the **object bench**. Make a couple of objects - at least 2 of the same class.
2. Right click on them to see their methods and inspect them to see their attributes.
3. Select methods from the menu to:
   a. Make the two objects visible. (BEWARE they will show up on top of each other so you have to move them out of the way to see more than one).
   b. Use various move methods to make them move.
   c. Use the changeColor method to change to "red".
   d. Right-click on circle2 in the object bench and select Inspect(). You should see something like the
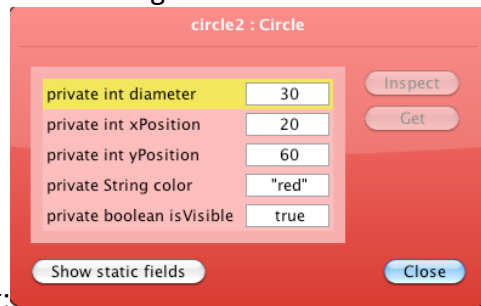
   following:
4. You can also use code on these objects in the codepad. Try the following:
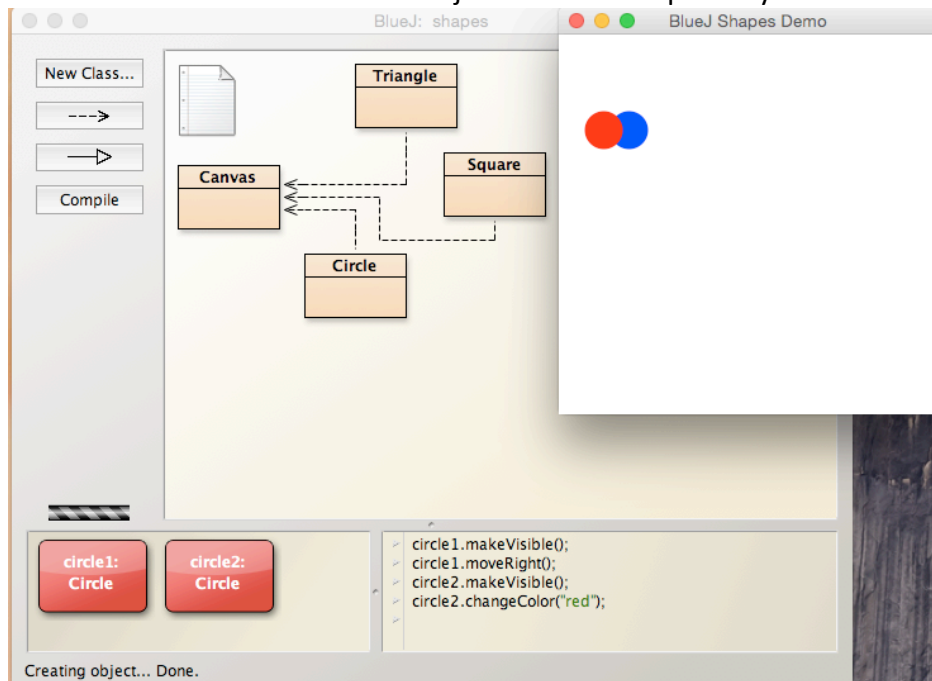
5. Draw a cartoon character of your choice using the codepad. **You can write the code in a separate file using a text editor and then copy and paste the code to codepad**. Hit the return key to execute it in one go. That way you keep a record of what you did.